What is claimed is:

Sub A1

1. A gateway apparatus capable of connecting to the internet, said apparatus being one of components constructing a home network, said apparatus comprising:

an IP address table that relates a plurality of apparatuses, each of which is one of the components constructing the home network, to IP addresses respectively assigned to the apparatuses to store;

a reception section that is configured to receive data with a destination indicative of one of the apparatuses constructing the home network;

a recognition section that is configured to recognize the apparatus with an IP address matching the IP address indicative of the destination contained in received data using the IP address table; and

a distribution section that is configured to transmit the received data to a recognized apparatus.

2. The gateway apparatus according to claim 1, further comprising:

a conversion section that is configured to execute processing for converting a type of the IP address indicative of the destination contained in the received data into a type of an IP address registered in the IP address table when the type of the IP address indicative of the destination is different from the type of the IP address registered in the IP address table.

3. The gateway apparatus according to claim 2, wherein

the type of the IP address indicative of the destination is IPv6, and the type of the IP address registered in the IP address table is IPv4.

4. The gateway apparatus according to claim 1, wherein the apparatuses constructing the home network include an apparatus that has a function of directly accessing to the internet to communicate, and an apparatus that does not have the function of directly accessing to the internet to communicate.

5. The gateway apparatus according to claim 4, wherein the apparatus that does not have the function of directly accessing to the internet to communicate includes at least one selected from the group consisting of a printer, a scanner, a television, a digital camera, a refrigerator, a hot-water supply, an electric power meter, and a tap water mater .

6. The gateway apparatus according to claim 1, further comprising:

a security system that is configured to exclude an incorrect use by performing password check to an access through the internet.

7. The gateway apparatus according claim 1, wherein a computer directly or indirectly connected to said gateway apparatus writes IP addresses of the apparatuses in the IP address table.

8. The gateway apparatus according to claim 1, further comprising:

converters, provided for each apparatus on the home network, each of which is configured to convert the received data into data that the apparatus as the destination of the received data is capable of processing;

wherein the IP address table further has pieces of application information related to the respective IP addresses of the apparatuses, and when the received data is data that the recognized apparatus is not capable of processing, the distribution section specifies a converter using the application information registered in the IP address table, requests the converter to convert the received data, and transfers the received data that is converted by the converter to the apparatus as the destination.

9. A gateway apparatus capable of connecting to the internet, said apparatus being one of components constructing a home network, said apparatus comprising:

a recognition section that is configured to recognize a non-IP apparatus as an originator issuing transmission data from among apparatuses on the home network, and a destination indicative of a reception terminal to receive the transmission data, by an instruction from another apparatus on the home network;

a reception section that is configured to receive the transmission data through the home network from the non-IP apparatus as the originator after the apparatus

as the originator and the destination indicative of the reception terminal are recognized; and

a communication section that is configured to convert received transmission data into an internet frame to transmit to the destination indicative of the reception terminal.

10. A method for distributing data transmitted through the internet to a reception terminal on a home network, comprising:

receiving the data with a destination indicative of one apparatus of apparatuses constructing the home network;

recognizing the apparatus with an IP address matching the IP address indicative of the destination contained in received data using an IP address table, the IP address table relating a plurality of apparatuses, each of which is one of components constructing the home network, to IP addresses respectively assigned to the apparatuses to store; and

transmitting the received data to a recognized apparatus.

11. A method for transmitting data from an apparatus on a home network through the internet to a reception terminal to receive the data, comprising:

recognizing a non-IP apparatus as an originator issuing transmission data from among apparatuses on the home network, and a destination indicative of a reception

terminal to receive the transmission data, by an instruction from an IP apparatus on the home network; the non-IP apparatus not having a function of directly accessing to the internet to communicate, and the IP apparatus having the function of directly accessing to the internet to communicate;

receiving the transmission data through the home network from the non-IP apparatus as the originator after the apparatus as the originator and the destination indicative of the reception terminal are recognized; and

converting received transmission data into an internet frame to transmit to the destination indicative of the reception terminal.